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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,370	12/28/2001	Hiroshi Orikabe	215207US0PCT	9246

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EXAMINER

KEEHAN, CHRISTOPHER M

ART UNIT PAPER NUMBER

1712

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,370

Applicant(s)

ORIKABE ET AL.

Examiner

Christopher M. Keehan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 6-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0304.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of the carboxyl species received 1/23/04 is acknowledged. The traversal is on the ground(s) that the office has not provided any reasons or examples to support a conclusion that the species are indeed patentably distinct, and further, that a search of all the claims would not constitute a serious burden on the Office. This is not found persuasive because JP 4-15272 indicates a specific species as claimed by applicant. Further, each species requires a different subclass search. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, and 6-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 1, 2, 6, and 7, applicant claims a functional group equivalent of 150 to 2000 g/mol. It is not clear what is meant by this value. In the specification, applicant discloses Resin F (a polybutadiene having carboxyl groups, $M_n = 1,711$, and an acid value (including solvent) = 70.1 mg KOH/g. An acid value of 70.1 mg KOH (MW of KOH is 56.1 g/mol) indicates that it takes 70.1 mg of KOH to neutralize the carboxyl groups per 1 gram of polymer. Going through the calculations, $[(70.1 \text{ mg KOH}/1 \text{ g polymer}) \times (1711 \text{ g/mol}) \times (1 \text{ g KOH}/1000 \text{ mg})] = 120$

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g/mol. This is not included in applicant's claimed range. Therefore, there is confusion as to what units applicant is using and to what they pertain for (B).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hoffman et al. (5,276,097). Hoffman et al. disclose a thermosetting resin composition comprising an epoxy resin (A) which has a number average molecular weight of 1200, and an epoxide equivalent of 316 (col.17, lines 36-46), both included in the claimed ranges, respectively, and a resin (B) which has a number average molecular weight of 500 to 8000 (col.17, lines 3-6), and an acid number that can be 67 mg KOH/g (col. 18, lines 1-5). Although Hoffman et al. do not appear to specifically disclose a functional group equivalent of (B), the acid number of Hoffman et al. is virtually the same as applicant's Resin F, and the number average molecular weight of Hoffman et al. shows a range that includes applicant's number average molecular weight of Resin F. Therefore, it appears that the functional group equivalent of (B) of applicant's is inherently disclosed by Hoffman et al. If not inherent, then it would have been obvious to one of ordinary skill in the art at the time the invention was made for the composition of Hoffman et al. to possess an at least similar

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functional group equivalent of (B) to that of applicant's, because the materials of Hoffman et al. are at least similar to those of applicant's, and at least similar materials would have yielded an at least similar functional group equivalent of (B), absent evidence to the contrary.

Allowable Subject Matter

Claims 2 and 6-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is (571) 272-1087. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu S. Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Keehan

March 11, 2004

CJK
DAVID J. BUTTNER
PRIMARY EXAMINER

David Buttner